



Dr. 4950 - 4995

next by ~~4884~~  
4885

Japanese Cruise  
1906.

No. 6

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

5074  
~~5074~~  
~~5074~~

No. 54950 Date 21 Aug. 06.

Lucas Machine. Reel. Lucas

Turns Cor. + Depth 529 fms

Shot or lead 35-lb and S.S. Cup

Bottom gn. M. Glob.

Bottom temperature 39°

No. of thermometer 108155 Cor. - .1

Corrected temperature 38°9

Air 85° Surface 84° Drift

Trawl or dredge 9' Agassiz

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
11.01.00	11.11.50	0	11.14.00	33 05
01.55	10.55	100	17.30	30 05
03.00	10.10	200	20.15	27 05
03.55	09.25	300	23.05	24 10
04.55	08.40	400	26.05	21 20
06.00	07.50	500	28.25	18 20
11.06.25	11.07.30	600	30.45	15 20
		700	33.30	12 20
		800	36.20	09 20
		900	39.00	06 05
		965.13	11.42.00	02 10
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Strong Current  
 to NE & E

Towed 20 m

2500	P.L.	9.6
2600	Weather	bc 2
2700	Wind	SW 2
2800	Sea	S
2900	Bar.	29.81
3000	Ther. att'd.	84°
3100	Chart	HD. 1302.
3200	Course <sup>Drift</sup>	<sup>Drift</sup> N-E
3300	Lat.	31° 15' N
3400	Long.	131° 39' E
3500	Oshima Light	
3600	N 36 1/2 W, Dist.	
3700	20 m.	
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 174951

Date 21 Aug 06

Machine.

Reel.

Turns

Cor. +

Depth

703

Shot or lead

60" Shot Sig Cup

Bottom

gn M. Glat.

Bottom temperature

37.8

No. of thermometer

1080155

Cor. - 0.1

Corrected temperature

37.2

Air

89

Surface

85.0

Drift

Trawl or dredge

9 ft Trawl

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

DOWN.	UP.	TURNS.	DOWN.	UP.
1 13 10	55 55	0	1 59 00	30 00
2 15	55 05	100	2 02 00	26 45
3 05	54 20	200	04 20	23 45
4 50	53 30	300	06 55	20 40
5 40	52 45	400	09 30	17 30
6 30	52 00	500	12 10	14 10
7 20	51 10	600	15 05	11 00
8 15	50 10	700	17 50	08 00
9 20	50 10	800	20 20	04 30
		900	23 00	30 100
		1000	25 40	58 00
		1100	28 10	55 00
		1200	31 10	51 20
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Towed 20 m

	2500	P.L.	90.6
	2600	Wye	60
	2700	Wye	102.3
	2800	Wye	2
	2900	Bar	29.79
	3000	Wye	86
	3100	Wye	SE
	3200	Wye	40/302
	3300	Lat	31°10'30"N
	3400	Long	131°58'30"E
	3500		
	3600	O. Shum Light	
	3700	N 54° W	
	3800	dist	32.2 m
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *475* Date *21 Aug 26*

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air *92* Surface *86 (3.59)* DriftTrawl or dredge *3-4 05 4-08-20*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0	<i>3-37-00</i>	<i>4-20-30</i>
		100	<i>40-00</i>	<i>17-20</i>
		200	<i>42-46</i>	<i>14-15</i>
		300	<i>45-20</i>	<i>11-15</i>
		400	<i>3-41-00</i>	<i>4-08-20</i>
		500		
		600		
		700		
		800	<i>Drawn 20 m</i>	
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Under be  
 Wind NW 2-3  
 Sea S  
 Bar 29.74  
 Therm - 86  
 Course 88 E. to Bl. R.  
 Chart No 1302  
 Lat 31° 10' 30" N  
 Long 131° 58' 30" E  
 Oshima Light  
 27 54° W  
 dist 35.2 m

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
Surf		85.0		
10 50	108021	84.3	-0.7	84.1°
25 100	104914	85.8	-0.3	85.5°
50 200	108154	81.3	-0.7	81.1°
100 300	108156	65.0	-0.7	64.8°
200 400	108013	54.0	-0.1	53.9°
300 500	108019	46.1	-0.7	45.9°
400 600	108155	40.7	-0.1	40.6°
600 700	98244	38.1	-0.1°	38.0°
800				
900	Water bottle on bottom			
1000				

## REMARKS:

Began lowering at 4-25-15  
 Last ther. down at 4-35-15  
 Began heaving in at 4-40-15  
 Last ther. up at 4-49-00

*hona*

No. *27 4952* Date *Aug 21, 1901*

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air *85°* Surface *84°* Drift

Trawl or dredge *Surface #1 from port boom. No. 2 and 3 towing astern.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN. <i>71</i>	UP. <i>71</i>
		0	<i>Out</i>	<i>In</i>
		100	<i>7-31-30</i>	<i>7-31-30</i>
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	
2600	Weather bc. 3
2700	Wind S.W. 2
2800	Sea S.
2900	Bar. 29.78
3000	Ther. att. 86°
3100	Course S. x E.
3200	Chart H.O. 1302
3300	Lat. 31° 19' N.
3400	Long. 132° 11' W.
3500	
3600	
3700	
3800	
3900	
4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

(No. 10. Date July 10.  
 Lucas Machine. Reel. Lucas  
 Turns Cor. + Depth 1350 fms.  
 Shot or lead 60 lb and 5 lb 7 lb 8 lb  
 Bottom br. M. fm. br. S. Fr.  
 Bottom temperature 35.9°  
 No. of thermometer 108019 Cor. — 1  
 Corrected temperature 35.8°  
 Air 85° Surface 86° Drift  
 Trawl or dredge 9' Agassiz

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

7:45:00	8:11:00	0	9:14:45	10:41:15
46.10	09.55	100	17.15	10:41:15
47.25	09.55	200	20.15	10:41:15
48.15	08.30	300	21.15	10:41:15
49.15	07.50	400	21.30	10:41:15
50.10	07.20	500	31.15	10:41:15
51.10	06.25	600	34.25	10:41:15
52.00	05.45	700	36.05	10:41:15
53.55	05.00	800	39.05	10:41:15
55.55	04.20	900	41.15	10:41:15
58.00	03.40	1000	44.10	10:41:15
56.00	02.50	1100	47.15	10:41:15
57.05	02.00	1200	48.30	10:41:15
58.10	01.10	1300	52.15	10:41:15
7:59:40	8:00:30	1400	55.10	10:41:15
		1500	58.05	10:41:15
		1600	7. 01.00	10:41:15
		1700	03.15	10:41:15
		1800	06.05	10:41:15
		1900	08.15	10:41:15
		2000	11.10	10:41:15
		2100	14.10	10:41:15
		2200		10:41:15
		2300		10:41:15
		2400		10:41:15

at 8:19:30 stopped  
 to repair register  
 which failed to  
 work, at 8:21:10  
 commenced reeling  
 out again, setting  
 register to 150 fms.  
 and out 2135 fms.  
 the rope.

2500		
2600	Weather	br. 1
2700	Wind	SW. 1
2800	Sea	S.
2900	Bar	29.84
3000	Ther. alt.	86°
3100	Chart	H.O. 1302
3200	Course PSC	drifting with current to NE.
3300	Lat.	31° 39' N
3400	Long.	137° 54' 40 E
3500		
3600		
3700		
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1115 Date June 10 1880Machine. Sigsbee Reel. 1Turns 757 Cor. + 5 Depth 762Shot or lead 35Bottom fine gy. s. lo.Bottom temperature 50.0No. of thermometer 9255 Cor. 0Corrected temperature 50.0Air 96 Surface 87.0 Drift 2.75Trawl or dredge 2 ft. dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

11/1/1911

also 1 Caracuda

No. 495-5 Date Aug 22, 1906

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air 84° Surface 83° Drift Surface 1/2 from post-lane, Elect. S.  
Trawl or dredge K's

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN. PM. UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

- Out - - In -

7-53-21 7-10-35

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

P.L.

Weather S. 1

Wind S. 1

Sea S.

Bar 29.5

Therm. 84

Lat 10° 30' N

Long 130° 30' E

Course 225

Chart H.O. 1302

Bearing S. - Catiguira

Gali 7.5 E.

Distance 21.5 mi.

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *D. 4956* Date *25, 1903*

*Lucas* Machine. Reel. *Lucas*

Turns Cor. + Depth *720 fms.*

Shot or lead *35-lb*

Bottom *gn-br. M. For. fm. gn. S.*

Bottom temperature *37.6°*

No. of thermometer *108155* Cor. *- 1.1*

Corrected temperature *37.5°*

Air *82°* Surface *83°* Drift

Trawl or dredge *9' Agassiz*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>45.35</i>	<i>7.53.45</i>	0	<i>8.51.15</i>	<i>8.52.30</i>
<i>46.35</i>	<i>58.00</i>	100	<i>06.15</i>	<i>23.00</i>
<i>47.30</i>	<i>57.20</i>	200	<i>09.00</i>	<i>20.00</i>
<i>48.25</i>	<i>56.40</i>	300	<i>11.50</i>	<i>17.20</i>
<i>49.30</i>	<i>55.55</i>	400	<i>14.30</i>	<i>14.40</i>
<i>50.15</i>	<i>55.10</i>	500	<i>17.10</i>	<i>12.00</i>
<i>51.15</i>	<i>54.25</i>	600	<i>19.45</i>	<i>09.10</i>
<i>52.20</i>	<i>53.35</i>	700	<i>22.15</i>	<i>06.10</i>
<i>7.53.45</i>	<i>7.53.45</i>	800	<i>24.45</i>	<i>03.20</i>
		900	<i>27.10</i>	<i>00.10</i>
		1000	<i>29.45</i>	<i>00.00</i>
		1100	<i>32.30</i>	<i>8.52.30</i>
		1200		
		1300		<i>20 min</i>
		1400		
		1500	* Stopped 1 1/2 min while navigating clear of wire, which chafed against ship's side.	
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	
2600	Wells 6
2700	Wind N. 3:
2800	Sea S.
2900	Bar 29.80
3000	Ther. std. 82°
3100	Chart H.O. 1302.
3200	Com. 10 N.W.
3300	Lat. 32° 30' N
3400	Long. 152° 25' W
3500	Mizunoto Shima Id.
3600	152° 25' W, 32° 30' N
3700	33 miles
3800	
3900	
4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 24957. Date 23 Aug. 06.

Lucas Machine. Reel. Lucas

Turns Cor. + Depth 437 fms.

Shot or lead 35-lb and 550

Bottom gn-bn. M. Fr. fine. gn. S.

Bottom temperature 39.9°

No. of thermometer 108155. Cor. - .1

Corrected temperature 39.8°

Air 85° Surface 83° Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
07.15	10.12.00	0	10.27.20	11.29.27
08.30	16.55	100	30.00	28.55
09.25	16.10	200	32.40	23.20
10.35	15.20	300	35.15	20.35
11.40	14.25	400	38.00	17.50
10.12.00	10.13.55	437 500	40.40	14.40
		600	43.00	11.50
		700	45.00	08.40
		800	47.00	05.30
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

		2500		
		2600	Weather	Sea 2.
		2700	Wind	W 11 S.
		2800	Sea	
		2900	Bar.	30.02
		3000	Ther. air.	52°
		3100	Chart	1000
		3200	Course	110° 15'
		3300	Lat.	35° 15'
		3400	Long. 137° 20' E	
		3500	Mizuno	11.10
		3600	N 220 N	11.10
		3700	29 miles	
		3800		
		3900		
		4000		

#### SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1147* Date

Machine. Reel.

Turns. Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor. *5.0*

Corrected temperature

Air *23* Surface

Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

*12.05.00*  
*132° 24' 30"*  
*14.00.00*

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 774 Date 25 March

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	71.2
	3900	28.13
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *TJ4960* Date *Dec 18 1881*

Machine. Reel.

Turns Cor. + Depth *571*Shot or lead *35 lb. Reg. bu. Cape*Bottom *co. fm. M. for fm. S*Bottom temperature *9.5*No. of thermometer *108155* Cor.Corrected temperature *9.4*Air *83°* Surface *82°* DriftTrawl or dredge *4 ft. 15 in. dredge*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

5074  
*Amphip.*

No. D. 4961 Date 27 Aug. 1906.

T.N. Machine. Reel.

Turns Cor. + Depth 33 fms.

Shot or lead 35 lb. S.S. Cup.

Bottom fine gy. S.M.

Bottom temperature 70.3

No. of thermometer 108155 Cor. - .2

Corrected temperature 70.1

Air 82° Surface 78° Drift

Trawl or dredge 9' Agassiz

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<u>2.15.40</u>	<u>2.15.50</u>	0	<u>2.18.10</u>	<u>2.18.25</u>
<u>2.15.15</u>	<u>2.15.50</u>	33 100	<u>2.22.50</u>	<u>2.18.30</u>
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	PZ.	66.1
	2600	Weather	bc.
	2700	Wind	37.5 /
	2800	Sea	S.
	2900	Bar.	29.82
	3000	Ther. sthd.	83°
	3100	Chart	No. 547-b
	3200	Course PSC	175° S
	3300	Lat. 34°	00' 1" N
	3400	Long. 134°	00' 0" W
	3500	Tomaga S.	
	3600	N 18° E (true)	8.5 mi.
	3700		
	3800		
	3900		
	4000		

#### SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. Δ. 4962 Date 27 Aug. 06.

Machine. Reel.

Turns Cor. +

Depth by Chart 36 fms.

Shot or lead

Bottom

No Sdg.

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air 82° Surface 78° DriftTrawl or dredge 9'

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0	2.58.45	3.22.25
		100	2.59.10	3.19.10
		200		
		300	2.00	
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	Weather
	2700	Wind
	2800	Sea
	2900	Bar. } as D. 4961.
	3000	The <del>ATD</del>
	3100	Chart
	3200	Come 1350 S by E.
	3300	Lat. 34° 08' N
	3400	Long. 134° 16' 20" E.
	3500	Tomara Shima Lt.
	3600	N. 18° E (true), dist. 9.5 mi.
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507. *Attili*

No. *Δ. 4963.* Date

Machine. Reel.

Turns Cor. + Depth *40 fms by ckt.*

Shot or lead

Bottom *260 Sdy*

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air *85°* Surface *78°* Drift

Trawl or dredge *9' Beam*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0	<i>3.40.20</i>	<i>4.06.00</i>
		100	<i>3.42.40</i>	<i>4.02.40</i>
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500		
2600	Weather	6.7
2700	Wind	SW. 1
2800	Sea	S.
2900	Bar	29.83
3000	Ther. atd	84°
3100	Chart	110. 111
3200	Com. 78	51. 52
3300	Lat. 34° 06' N	T
3400	Long. 151° 57' W	E
3500	Tomaga Shins Lt	
3600	T 8 1/2 E, (L.)	
3700	dist 11 miles	
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Δ. 4968* Date *27 Nov. 06.*

Machine. Reel.

Turns Cor. + Depth *37 fms.*

Shot or lead *35 lb. S.S. Cap*

Bottom *fine gy. S. M.*

Bottom temperature *66.8°*

No. of thermometer *108155* Cor. *- .2*

Corrected temperature *66.6°*

Air *83°* Surface *82°* Drift

Trawl or dredge *9' Agassiz*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>4.14.40</i>	<i>4.16.20</i>	0	<i>4.15.30</i>	
<i>4.15.5</i>	<i>4.14.25</i>	27 100	<i>4.14.20</i>	
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*= 40 min.*

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Weather

Wind

Sea

Bar.

Ther. att'd.

Chart

Course P.S.C. SW

Lat. 34° 15' 20" N

Long 134° 55' 00" E

Donaga Shima Is.

25 S. 11 S.

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *14965* Date *28 Aug*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *191*  
 Shot or lead *35 lbs*  
 Bottom *gy. sh. 94.5*  
 Bottom temperature *14.9*  
 No. of thermometer *108155* Cor. *-0.1*  
 Corrected temperature *14.8*  
 Air *13* Surface *82* Drift *0.30*  
 Trawl or dredge *9 ft. beam*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

# REMARKS:

... ..  
... ..

106

No. 10. 4966 Date Aug 29/06

Lucas Machine. Reel. Lucas

Turns Cor. + Depth 290 f

Shot or lead 35 lbs. & lighe cup.

Bottom br. M., S., For.

Bottom temperature 4

No. of thermometer 108155 Cor. -.1°

Corrected temperature 44.1°

Air 83° Surface 80° Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *D. 4967* Date *Aug. 29, 1906*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *244 fath*  
 Shot or lead *4 large cbs*  
 Bottom *gy. m. s.*  
 Bottom temperature *46°*  
 No. of thermometer *108155* Cor. *-.1°*  
 Corrected temperature *45.9°*  
 Air *81°* Surface *80* Drift  
 Trawl or dredge *9' —* *- 356.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11-50</i>	<i>9-46-45</i>	0	<i>9-52-30</i>	<i>10-39-45</i>
<i>42-50</i>	<i>46-00</i>	100	<i>5-5-15</i>	<i>37-00</i>
<i>43-30</i>	<i>45-10</i>	200	<i>5-7-35</i>	<i>31-20</i>
<i>44-00</i>	<i>9-44-40</i>	<del>300</del>	<i>10-00-30</i>	<i>31-45</i>
		400		<i>10-00</i>
		500		<i>00-00</i>
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Weather *bc*  
 Wind *E. X N. - 3*  
 Sea *S.*  
 Vis. *24.*  
 Therm. *82°*  
 Course *E. S. E.*  
 Chart *N.O. 2248*  
 Lat. *33° 26' 10" N.*  
 Long. *135° 37' 20" E.*  
 Bearings: *Alia*  
*Misaki Light N. 80°*  
*E. dist. 5. mi.*

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *11. 496*Date *Aug. 21**Lucas*

Machine.

Reel.

Turns

Cor. +

Depth *2*Shot or lead *35 lbs. & Signal cup*Bottom *dk. gy. S., br. M.*Bottom temperature *45.1°*No. of thermometer *10815-5*Cor. *-1°*Corrected temperature *45.7°*

Air

*82°*

Surface

*81°*

Drift

Trawl or dredge */*

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

*10-47-20 10-53*

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

	2500	
	2600	Direction S. by E. - 1
	2700	Wind E. X N. - 3
	2800	Sea M.
	2900	Bar 29.91
	3000	Therm. 52°
	3100	Course S. E. & S. W.
	3200	Speed 5.5 miles
	3300	Lat. 50° 20' N.
	3400	Long. 105° 01' W.
	3500	Bearings: - This
	3600	Misaki Light
	3700	N. 77° E. dist. 5.5
	3800	
	3900	
	4000	

#### SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *D. 4969* Date *29 Aug. 06.*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *587 fms.*  
 Shot or lead *35-# x S.S. Cup.*  
 Bottom *bn. M.S. St.*  
 Bottom temperature *39°*  
 No. of thermometer *108155* Cor. *-.1*  
 Corrected temperature *38.9*  
 Air *82°* Surface *80°* Drift  
 Trawl or dredge *9' dredge.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1. 02.25</i>	<i>1. 32.25</i>	0	<i>1. 26.40</i>	<i>7. 12.00</i>
<i>x 03.25</i>	<i>32.25</i>	100	<i>x 41.30</i>	<i>49.00</i>
<i>28.45</i>	<i>31.15</i>	200	<i>43.00</i>	<i>46.10</i>
<i>29.45</i>	<i>30.25</i>	300	<i>45.00</i>	<i>43.20</i>
<i>30.45</i>	<i>29.30</i>	400	<i>47.00</i>	<i>40.35</i>
<i>35.45</i>	<i>28.25</i>	500	<i>49.30</i>	<i>37.20</i>
<i>1. 16.25</i>	<i>1. 27.40</i>	600	<i>53.00</i>	<i>34.40</i>
		700	<i>55.25</i>	<i>31.50</i>
		800	<i>57.45</i>	<i>29.00</i>
		900	<i>2. 00.10</i>	<i>25.55</i>
		1000	<i>2. 02.35</i>	<i>22.35</i>
		1100		
		1200		
		1300		
<i>x Shaved reeling</i>		1400		
<i>out 150 yds. wire until</i>		1500		
<i>2. 21.40, to navigate</i>		1600		
<i>Ship over bottom</i>		1700		
<i>diagonal wire.</i>		1800		
		1900		
<i>x 2. 21.40 to 2. 21.45</i>		2000		
<i>reeling dredge rope</i>		2100		
<i>to navigate ship clear</i>		2200		
<i>of same, reeled</i>		2300		
<i>out at 1. 39.10</i>		2400		

2500	3.5	152.6
2600	7.5	bag 2
2700	Wind	Eby N - ESE 3
2800	Sea	S.
2900	Bar	29.88
3000	Th. alt.	840
3100	Char	H. 2300
3200	Com. S. S.	1300
3300	Lat. 33°	23' 40" N
3400	Long. 130°	33' E.
3500	Shio Misaki Lt.	
3600	N 77° E (2) 42	
3700	9.8 miles	
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date 29 Aug. 06

Machine.	Reel.
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

<i>Turns</i>	<i>Cor. +</i>	<i>Depth</i>
--------------	---------------	--------------

*Shot or lead*

*Bottom*

No Sdg.

Bottom temperature

No. of thermometer ..... Cor.

Corrected temperature

Air 81- Surface 80- Drift

Trawl or dredge *Int. N° 1. 5. 1894. No 2. 1895.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0	3.08.25	3.54.30
		100	11.25	50.50
		200	14.25	47.00
		300	17.00	43.10
		400	3.19.45	3.39.45
		500		
		600	Towed 20 min. at	
		700	an actual depth	
		800	of 300 fms.	
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Weather *May 2.*Wind *ESE 3.*Sea *S.*Bar *29.86*Th. at *84°*Chart *H.O. 2218*Compass *ESE.*Long. } *Position*

as at beginning

of Station

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 10. 4970

Date Aug. 30, 1880

Lucas Machine. Reel. Lucas

Turns Cor. + Depth 50

Shot or lead 35# &amp; Sigsbee cup

Bottom br. M. bk.

Bottom temperature 39.2°

No. of thermometer 10815-5 Cor. - .1

Corrected temperature 39.1°

Air 85° Surface 81° Drift

Trawl or dredge 9' Sigsbee

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *W. 4971* Date *6*

Machine. Reel.

Turns Cor. + Depth *649* *2*Shot or lead *35 lb*Bottom *br.*Bottom temperature *38.2°*No. of thermometer *108135* Cor. - *1°*

Corrected temperature

Air *64°* Surface *81°* DriftTrawl or dredge *9*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200	33° 28' 30" N	
	3300	125° 20' 00" E	
	3400		
	3500	Shio	
	3600	Misaki Light.	
	3700	N 75° E. 9.6 mi.	
	3800		
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *D. 4972*. Date *30 Aug. 06.*Machine. *Sigsbee* Reel. *Sigsbee*Turns Cor. + Depth *440 fms.*Shot or lead *35 lb and 25 lb*Bottom *fine sand & shells*Bottom temperature *39.9°*No. of thermometer *108155* Cor. *- .1*Corrected temperature *39.8°*Air *82°* Surface *82°* DriftTrawl or dredge *9' Agassiz*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1.04.50</i>	<i>1.13.35</i>	0	<i>1.16.55</i>	<i>2.16.05</i>
<i>05.45</i>	<i>12.40</i>	100	<i>18.25</i>	<i>13.00</i>
<i>06.45</i>	<i>11.55</i>	200	<i>22.20</i>	<i>10.10</i>
<i>07.45</i>	<i>11.00</i>	300	<i>24.55</i>	<i>07.10</i>
<i>08.45</i>	<i>10.15</i>	400	<i>27.30</i>	<i>04.10</i>
<i>1.09.05</i>	<i>1.00.45</i>	<i>440</i> 500	<i>29.55</i>	<i>2.01.15</i>
		600	<i>32.30</i>	<i>58.00</i>
		700	<i>1.35.15</i>	<i>1.55.15</i>
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	
2600	Weather bez. 1
2700	Wind SE 2.
2800	Sea S.
2900	Bar. 29.88
3000	Ther. Air. 82°
3100	Chart H.O. 2248.
3200	Current WNW
3300	Lat. 27° 25' N
3400	Long. 135° 15' W
3500	Ship's Name
3600	W 84 1/2 mi. N.E.
3700	11.5 mi.
3800	
3900	
4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *2472* Date *Oct 16*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *600 fms.*  
 Shot or lead *35 lb & S.S. Cup.*  
 Bottom *"bn. M. St."*  
 Bottom temperature *38.3*  
 No. of thermometer *108155* Cor. *- .1*  
 Corrected temperature *38.2*  
 Air *82°* Surface *81°* Drift  
 Trawl or dredge *9' Agassiz*

SOUNDING WIRE.

DOWN. UP.

TURNS.

DREDGE ROPE.

DOWN. UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500		
2600	Weather	623.3
2700	Sea	8.
2800	Bar.	29.85
2900	Th. alt.	840
3000	Chart	21.0.2248.
3100		
3200		
3300	Lat. 33°	24' 15" N
3400	Long. 135°	30' 30" E
3500	Ship	Miscellaneous Lt.
3600	N 82° E (tr.)	dist.
3700	12.5	miles
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

1876

Date

31 Aug. 1876

Machine.

Reel.

Turns

Cor. +

Depth

Shot or lead 60-lb &amp; S.S. Cup.

Bottom

fine gn. M. Loc.

Bottom temperature

36.7

No. of thermometer

108019

Cor.

Corrected temperature

36.1

Air

82°

Surface

82°

Drift

Trawl or dredge

1' Agassiz

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
8. 57.15	10.59.50	0		
11. 15	56.50	100		
13. 15	55.45	200		
15. 15	54.40	300		
17. 15	53.35	400	12.00	52.30
19. 15	52.30	500	14.35	51.25
21. 15	51.25	600	17.00	50.20
23. 15	50.20	700	19.15	49.15
25. 15	49.15	800	21.35	48.10
27. 15	48.10	900		47.05
29. 15	47.05	1000	16.40	46.00
31. 15	46.00	1100	19.05	45.00
		1200	21.25	44.00
		1300	23.15	43.00
		1400	25.00	42.00
		1500	26.45	41.00
		1600	28.30	40.00
		1700	30.15	39.00
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	Ql.	6.4
2600		
2700	Wind	Variable 1-2
2800	Sea	S.
2900	Surf.	27.87
3000	Therm. at	826
3100		22.48
3200		WNW
3300	33°	18' 10" N
3400	Long 135°	10' E
3500		
3600	N 20° E (Ar.)	dist.
3700	8.7	
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1225* Date *31/11*

Machine. Reel.

Turns Cor. + Depth *712*

Shot or lead *35*

Bottom *M. S. G. C.*

Bottom temperature *37.*

No. of thermometer Cor. —

Corrected temperature

Air *14* Surface Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	57	
	2600	Weather	fine
	2700	Wind	
	2800		
	2900		
	3000		
	3100	Current	
	3200	Chart	111, 2248
	3300	Lat	35° 21' 31" N.
	3400	Long	135° 38' 50" E
	3500		
	3600	Dist. to land	
	3700	7.490 E.	7.0 mi
	3800		
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 475 Date Aug 26

Machine. Reel.

Turns Cor. + Depth 545

Shot or lead 35 lbs Cup

Bottom M. S. St.

Bottom temperature

No. of thermometer 10009 Cor. -

Corrected temperature 34.5

Air 75° Surface 82° Drift

Trawl or dredge 9 ft. K. S. S.

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

45.0 4-08-00

100

47.0 05-40

200

59.0 4-02-30

300

50.4 5-9-30

400

56.2 5-6-25

500

58.5 5-3-25

600

3.01.15 5-0-0

700

800

06.10 4-35.0

900

08.55 4-02.0

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	185° 35' 30"
	3500	
	3600	<i>Shio Mung Light</i>
	3700	<i>71.59° 6.4'</i>
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *10, 4977* Date *June 10, 1907**Lucas* Machine. Reel.

Turns Cor. + Depth

Shot or lead *35 lb x S.S. shot*Bottom *br. M. s.*Bottom temperature *13.9°*No. of thermometer *1080* Cor.Corrected temperature *13.9°*Air *8.9°* Surface DriftTrawl or dredge *9' Agassiz*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		<i>52.5</i>
		400		<i>41.00</i>
		500		<i>31.00</i>
		600		<i>21.00</i>
		700		<i>40.00</i>
		800		<i>37.00</i>
		900		
		1000		
		1100		
		1200		
		1300		
		1400		<i>= 20.00</i>
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	2000
	3200	
	3300	
	3400	
	3500	
	3600	Waves 2-3 ft high
	3700	(70), dist: 7 miles
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

500  
1000  
Songs

No. *D. 4978* Date *Aug. 31/06*

Machine. Reel. *V*

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air *81°* Surface *82°* Drift

Trawl or dredge *No. 243 towing astern*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		<i>Haul</i>
		1300		
		1400		<i>H</i>
		1500		<i>7-37</i>
		1600		
		1700		<i>Int<sup>th</sup> 1 towed 20 min</i>
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	Weather bc - C
	2700	
	2800	Sea
	2900	Base 27.7
	3000	Ther. att 84
	3100	Course E. N. E. 1/2 E.
	3200	Chart No. 2248
	3300	Lat 33° 24' 50" N
	3400	135° 56' E.
	3500	
	3600	Ther. att 84
	3700	N. 49° 10' 5.0 mi
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *L. 457* Date *1 Sept. 06*

*Lucas* Machine. Reel. *Lucas*

Turns Cor. + Depth *943 fms.*

Shot or lead *35 lb. S.S. Cup*

Bottom *fm. M. fm. S. Fr.*

Bottom temperature *36.5*

No. of thermometer *108019* Cor. *- 1*

Corrected temperature *36.4*

Air *82°* Surface *82°* Drift

Trawl or dredge *9' Agassiz*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>45.30</i>	<i>8.09.00</i>	0	<i>8.10.30</i>	<i>10.34.00</i>
<i>46.30</i>	<i>09.00</i>	100	<i>18.30</i>	<i>31.45</i>
<i>47.30</i>	<i>07.10</i>	200	<i>21.20</i>	<i>28.55</i>
<i>48.30</i>	<i>06.20</i>	300	<i>24.10</i>	<i>26.05</i>
<i>49.45</i>	<i>05.20</i>	400	<i>27.00</i>	<i>23.20</i>
<i>51.00</i>	<i>04.25</i>	500	<i>29.40</i>	<i>20.20</i>
<i>52.15</i>	<i>03.30</i>	600	<i>32.15</i>	<i>17.15</i>
<i>53.30</i>	<i>02.35</i>	700	<i>34.45</i>	<i>14.10</i>
<i>55.00</i>	<i>01.30</i>	800	<i>37.40</i>	<i>11.15</i>
<i>57.10</i>	<i>8.00.20</i>	900	<i>40.00</i>	<i>08.05</i>
<i>59.50</i>	<i>7.57.15</i>	1000	<i>42.30</i>	<i>05.00</i>
		1100	<i>45.00</i>	<i>10.01.20</i>
		1200	<i>47.15</i>	<i>07.00</i>
		1300	<i>50.00</i>	<i>53.45</i>
		1400	<i>53.00</i>	<i>50.00</i>
		1500	<i>55.40</i>	<i>46.20</i>
		1600	<i>58.30</i>	<i>42.30</i>
		1700	<i>9.01.00</i>	<i>38.45</i>
		1800	<i>9.04.10</i>	<i>9:34:10</i>
		1900	<i>= 30 min</i>	
		2000		
		2100	<i>Net came up</i>	
		2200	<i>haul - bottom at</i>	
		2300	<i>same thrown in</i>	
		2400	<i>opening. Two tail</i>	

*Weights were attached, and net was  
down at 2100 m. and regular haul, and  
the two tail*

	2500	(25.7)	
	2600	28.20	0m. 10
	2700	Wind	28.5. 16.
	2800	Sen	C.
	2900	1 Bar.	29.26
	3000	Thic. atts	4.00
	3100	Chart 100	241
	3200	1000 fms	25.5
	3300	1000 fms	27.5
	3400	1000 fms	28.5
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 174. 4068 Date 1 24

Machine. Reel.

Turns Cor. + Depth 971

Shot or lead 35 lbs

Bottom gy S. M. gy S. gy S.

Bottom temperature 36.0

No. of thermometer 101019 Cor. - .1

Corrected temperature 35.9

Air Surface Drift

Trawl or dredge

SOUNDING WIRE.

DOWN. UP.

TURNS.

DREDGE ROPE.

DOWN. UP.

1 13 00	24 15	0		
		100		
05 15		200		
06 20		300		
		400		
		500		
		600		
10 12 15		700		
12 40		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1480 Date 1 Aug

Machine. Reel.

Turns. Cor. + Depth

Shot or lead 35Bottom on 2000Bottom temperature 39.1No. of thermometer 1010 Cor. 1Corrected temperature 39.Air 4 Surface 18 DriftTrawl or dredge 9 ft

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507. *Lucas*

No. *104981* Date *Sept. 17*  
*Lucas* Machine. Reel. *Lucas*  
Turns. Cor. + Depth *406* fath.  
Shot or lead *35* + *Sigsbee* cup  
Bottom *gn. M.*  
Bottom temperature *32.8*  
No. of thermometer *108153* Cor. *- .1*  
Corrected temperature *32.7*  
Air *67* Surface *68* Drift  
Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>7-46-30</i>	<i>7-54-20</i>	0		
<i>47-30</i>	<i>53-40</i>	100		
<i>48-25</i>	<i>53-00</i>	200		
	<i>52-10</i>	300		
<i>50-24</i>		400	<i>11-51</i>	
<i>7-50-40</i>		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Under  
best temp.

28.

99-97

10-12

11-12-14

14-5 of 122.

11-12.

B. 4. 1000

B. 4. 1000

11-12-14

11-12-14

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *D. 4982* Date *Jan 1 1881*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *390 fath*  
 Shot or lead *35 lb + 2 lb extra*  
 Bottom *gn. M.*  
 Bottom temperature *32*  
 No. of thermometer *1081355* Cor. *-.1°*  
 Corrected temperature *32.7*  
 Air *66°* Surface *68°* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11-50</i>	<i>17-30</i>	0	<i>10-18-35</i>	
<i>11-55</i>	<i>17-25</i>	100	<i>15-15</i>	
<i>12-50</i>	<i>17-00</i>	200	<i>27-40</i>	<i>12-15</i>
<i>13-50</i>	<i>16-15</i>	300	<i>30-20</i>	<i>9-15</i>
<i>14-45</i>	<i>15-30</i>	400	<i>33-15</i>	<i>6-05</i>
		500	<i>10-02-40</i>	
		600	<i>29-00</i>	<i>9-59-00</i>
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500		
2600	2600	1.0
2700	2700	S.E.
2800		
2900		
3000	3000	6.8
3100	3100	1.8
3200	3200	1.8
3300	3300	43° 00' 00" N.
3400	3400	140° 10' 30" E.
3500	3500	1.8
3600	3600	1.8
3700	3700	1.8
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 10. 4983 Date Sept 19- 19 6  
 Lucas Machine. Reel. Lucas  
 Turns Cor. + Depth 428 fath.  
 Shot or lead 35<sup>#</sup> 4 Riggsby cast.  
 Bottom gn. M.  
 Bottom temperature 32.8°  
 No. of thermometer 10815-5 Cor. -.1°  
 Corrected temperature 32.7°  
 Air 60° Surface 68° Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
10-31	10-11-25	0	10-42-15	11-31-30
32-10	35-15	100		35-30
33-10	37-30	200	44-22	38-30
34-10	36-15	300	47-22	41-30
35-10	36-10	400	50-15	44-30
36-30	35-40	500	53-20	47-30
		600	56-30	50-30
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Chart A. 3438

Lat.  $43^{\circ} 01' 35''$  NLong.  $140^{\circ} 10' 40''$  E.

Bearings: -

Mizake

S  $2^{\circ}$  E. dist 12 mi

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1001* Date *10 Sept. 06.*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *248 fms.*  
 Shot or lead *35 lb S.S. Cup.*  
 Bottom *gn. M.*  
 Bottom temperature *33.1*  
 No. of thermometer *108155.* Cor. *- .1*  
 Corrected temperature *33.0*  
 Air *64°* Surface *68°* Drift  
 Trawl or dredge *9' Agassiz.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1.00.25</i>	<i>1.06.00</i>	0	<i>1.10.40</i>	<i>1.08.00</i>
<i>01.05</i>	<i>05.05</i>	100	<i>13.05</i>	<i>05.15</i>
<i>01.55</i>	<i>04.15</i>	200	<i>16.10</i>	<i>05.10</i>
<i>1.02.30</i>	<i>1.03.20</i>	<i>244</i>	<i>18.55</i>	<i>05.00</i>
		300		
		400	<i>21.10</i>	<i>15.15</i>
		450	<i>1.23.00</i>	<i>1.43.30</i>
		500		
		600	<i>= 20</i>	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500		
2600	715	Sea 0
2700	Wind	ENE 2
2800	Sea	6
2900	Bar.	30.03
3000	Ther. att.	68°
3100	Chart	B.A. 3438.
3200	Course PSC	East.
3300	Lat.	43° 04' 20" N.
3400	Long.	140° 12' 10" E.
3500	Bottom	fine sand, sh.
3600	Co. 715	fine sand, sh.
3700		
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *11015* Date *12 Sept. 00.*

*J* Lucas Machine. Reel. *Lucas*

Turns Cor. + Depth *224 fms.*

Shot or lead *35 lb & 35 lb. each, linked together*

Bottom *gn. M. (?)*

Bottom temperature *33.2*

No. of thermometer *98244* Cor. *- 1*

Corrected temperature *33.1*

Air *66°* Surface *69°* Drift

Trawl or dredge *9' Agassiz*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>2.13.00</i>	<i>2.19.00</i>	0	<i>2.22.10</i>	<i>3.05.30</i>
<i>13.50</i>	<i>18.00</i>	100	<i>24.55</i>	<i>3.02.30</i>
<i>14.45</i>	<i>16.55</i>	200	<i>27.40</i>	<i>29.75</i>
<i>15.40</i>	<i>2.16.20</i>	<i>224</i>	<i>30.20</i>	<i>26.75</i>
		300		
		400	<i>2.33.00</i>	<i>2.55.15</i>
		500		
		600	<i>= 20 min.</i>	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	
2600	Weather. Bess 4.
2700	Wind. Variable 2
2800	Sea. S
2900	Bar. 30.00
3000	Ther. att'd. 69°
3100	Chart. B. A. 3438.
3200	Course. RSC. S.E.
3300	Lat. 43° 5' 20" N.
3400	Long. 140° 15' 15" E.
3500	Name. Min. to 3000.
3600	N. 17° E. (°), dist. 15.2
3700	miles.
3800	
3900	
4000	

#### SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4986* Date *10. 1. 1906*  
*Lucas* Machine. Reel. *Lucas*  
 Turns Cor. + Depth *172 fms.*  
 Shot or lead *35 lb & S.S. Cup*  
 Bottom *fine sh S bk*  
 Bottom temperature *34.0*  
 No. of thermometer *10555* Cor. *- 1*  
 Corrected temperature *33.0*  
 Air *68°* Surface Drift  
 Trawl or dredge *9'*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3. 15.00</i>	<i>3. 45.15</i>	0	<i>3. 51.00</i>	
<i>45.20</i>	<i>4. 25</i>	100		
<i>3. 40.40</i>	<i>3. 40.40</i>	<i>172</i>		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	P.L.	44.7
2600	Water	44.2
2700	Wind	SE 2.
2800	Sea	S.
2900	Bar.	30.00
3000	Th. att'd.	68°
3100	Chart	BA. 3438.
3200	Course ASC.	E-E SE
3300	Lat.	43° 01' 40" N
3400	Long.	140° 22' 40" E
3500	Bentley	Nizaki Lt.
3600	N 35° E.	15 miles.
3700		
3800		
3900		
4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4987 Date Sept 20/06

T. N. Machine. Reel. T. N.

Turns Cor. + Depth 594

Shot or lead 30<sup>lb</sup> lead.

Bottom *slip.*

Bottom temperature 45.0°

No. of thermometer 108019 Cor. - .2°

Corrected temperature 44.8

Air 78° Surface 68° Drift

Trawl or dredge 8 Tangle snare.

SOUNDING WIRE.

DOWN. *AM.* UP.

TURNS.

DREDGE ROPE.

DOWN. *A. M.* UP.

9-36-10 9-35-10

0

9-59-20 10-00-00

9-36-30 9-37-00

30

10-02-10

100

150

10-06-20 10

200

300

= 20 min.

400

500

Swab 450

600

2 min.

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

2  
1  
1  
2  
3  
6  
6.7 5.8  
Lat. 43° 19' 20" N.  
Long. 140° 17'  
Bearings: Kamoi  
Misaki Light  
N. 71° E. dist. 20 miles

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Let out 42 fath wire with tangles attached.

507.  
Dec 11/1892

No. *104* Date *Sept 20/06*

*14* Machine. Recl. *4M*

Turns Cor. + Depth *68* Lat.

~~Shot~~ or lead *30 lbs*

Bottom *S.*

Bottom temperature *45.1°*

No. of thermometer *108135* Cor. *- .1°*

Corrected temperature *45°*

Air *78°* Surface *70°* Drift

Trawl or dredge *9'*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11-3-20</i>	<i>11-5-00</i>	0	<i>11-35-20</i>	<i>11-35-00</i>
<i>11-4-25</i>	<i>11-4-35</i>	<i>68</i>	<i>12-00</i>	<i>33-15</i>
		<del>100</del>	<i>11-12-45</i>	<i>11-32-45</i>
		<i>120</i>		
		<del>200</del>		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	
2600	P.L. 77.2.
2700	Weather bc 7
2800	Wind Variable 1
2900	Sea L
3000	Bar. 30.07
3100	Ther. 48°
3200	Ther. 48° 75' 10"
3300	Ther. 48° 71' 10"
3400	Course 45.
3500	Chart No. 100
3600	Bearing :
3700	Rom. W. 40°
3800	S 3° W. 2.0'
3900	
4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *2040* Date *20 Dec. 06.**T.N.* Machine. Reel.Turns *94* Cor. *4* - *2* = Depth *42 fms.*Shot or lead *Long Shank 30 lb*Bottom *S.*Bottom temperature *39.8*No. of thermometer *108155* Cor. *- 1*Corrected temperature *39.7*Air *74°* Surface *71°* DriftTrawl or dredge *9' Agassiz**52* SOUNDING WIRE.*42* DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>1. 04.00</i>	<i>1. 07.20</i>	<i>0</i>	<i>1. 11.00</i>	<i>1. 42.40</i>
<i>1. 04.15</i>	<i>1. 05.05</i>	<i>100</i>	<i>1. 11.00</i>	<i>1. 42.40</i>
		<i>200</i>	<i>1. 11.20</i>	<i>1. 37.00</i>
		<i>300</i>		
		<i>400</i>		
		<i>500</i>		
		<i>600</i>		
		<i>700</i>		
		<i>800</i>		
		<i>900</i>		
		<i>1000</i>		
		<i>1100</i>		
		<i>1200</i>		
		<i>1300</i>		
		<i>1400</i>		
		<i>1500</i>		
		<i>1600</i>		
		<i>1700</i>		
		<i>1800</i>		
		<i>1900</i>		
		<i>2000</i>		
		<i>2100</i>		
		<i>2200</i>		
		<i>2300</i>		
		<i>2400</i>		

	2500	P.L. ....	89.5
	2600	W. ....	89.5
	2700	Wind. ....	Variable.
	2800	.....	.....
	2900	Bar. ....	30.03
	3000	Th. att'd. ....	69°
	3100	Chart ....	B. 7. 3438.
	3200	.....	.....
	3300	Lat. 43° 23' 10" N.	
	3400	Long. 140° 37' 00" E.	
	3500	.....	.....
	3600	S. ....	.....
	3700	G. / ....	.....
	3800		
	3900		
	4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *II 4990* Date *21 Oct 06*Machine. Reel. *1*

Turns Cor. + Depth

Shot or lead

Bottom *W Sd*

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Net Hcp. - 4885

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 10 4991 Date *September 10*

Lucas Machine. Reel. Lucas

Turns Cor. + Depth 325 fath.

Shot or lead 35<sup>th</sup> & *Lucas* cutBottom *gy. M.*

Bottom temperature 33.1°

No. of thermometer 98244 Cor. -1°

Corrected temperature 33.0°

Air 66° Surface 67° Drift

Trawl or dredge 9' Ag.

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 10. 4992 Date Sept. 22

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air 66° Surface 66° Drift

Trawl or dredge 9' - Agassiz

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	
	2700	
	2800	Shima
	2900	
	3000	
	3100	
	3200	Course
	3300	Chart 784, 2124
	3400	Lat. 45° 24' N.
	3500	Long. 140° 49' 10" E.
	3600	Bearing: - Bonasie
	3700	Shima (off N. end
	3800	Return to N. 33° E
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 10,4993 Date Sept 22/06  
 Lucas Machine. Reel. Lucas  
 Turns Cor. + Depth 142 fath.  
 Shot or lead 35#  
 Bottom gy. M. S. L.  
 Bottom temperature 35.2°  
 No. of thermometer 9824 Cor. -.1°  
 Corrected temperature 35.1°  
 Air 66° Surface Drift  
 Trawl or dredge 7' Agassiz

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	45° 25' 30" 71
	3200	45° 53' 00" 71
	3300	
	3400	Chart 24. 71-75
	3500	Bearings
	3600	Bonafide time 11
	3700	7. 5. 10. 11. 12. 1
	3800	7. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 1
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *274* Date *22 Dec. 1906*

*Machine.* *Reel.*

Turns *Cor. +* Depth *190 fms.*

Shot or lead *35 lb. v. S.S. Cap*

Bottom *br. M. fine. bk. S.*

Bottom temperature *34.1*

No. of thermometer *108155* Cor. *-1*

Corrected temperature *34°*

Air *66°* Surface *67°* Drift

Trawl or dredge *9' Agassiz*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1.03.5</i>	<i>1.07.5</i>	0	<i>1.12.30</i>	<i>1.13.10</i>
<i>04.10</i>	<i>06.45</i>	100	<i>15.10</i>	<i>14.10</i>
<i>05.20</i>	<i>1.00.00</i>	200	<i>17.55</i>	<i>15.20</i>
		300	<i>1.20.50</i>	<i>1.15.10</i>
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

Weather beam 9.

Wind SSW 4.

Sea M.

Baroid 30.12

Chart HO. 2124

Course ESE

Lat. 45° 27' 30" N

Long 140° 54' 00" E

Domasiri Shinn

(off N end Rebin To)

N. 66 E. (tr.) Dist.

3.1 miles.

## SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507  
*Lucas*

No. *D. 4995* Date *22 Sep. 1906.*

*Lucas* Machine. Reel. *Lucas*

Turns Cor. + Depth *86 fms.*

Shot or lead *35 lb & S.S. Cup.*

Bottom *bk. S. P.*

Bottom temperature *43.5*

No. of thermometer *108155* Cor. *- .1*

Corrected temperature *43.4*

Air *67°* Surface *67°* Drift

Trawl or dredge *9 Agassiz.*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>7.06.55</i>	<i>7.39.45</i>	0	<i>7.44.30</i>	<i>3.15.00</i>
<i>7.38.00</i>	<i>7.38.50</i>	<i>86</i> 100	<i>47.15</i>	<i>12.00</i>
		200	<i>7.49.40</i>	<i>3.09.40</i>
		300	<i>= 20 min.</i>	
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

2500	P.L.	57.5
2600	Weather	Var 9.
2700	Wind	S.S.W. 4.
2800	Sea	M
2900	Amplitude	29.80
3000	Chart	H.O. 2124.
3100	Com. PSC.	East.
3200	Lat. 45°	33' 40" N.
3300	Long. 140°	54' 00" E.
3400	Bonassiri Shima	
3500	S 29° E (br), dist	
3600	5.8 miles	
3700		
3800		
3900		
4000		

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

# REMARKS:

Continued in our next.

No. Date

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

1105

10

60

$$\begin{array}{r} 2 \overline{) 5.45} \\ 2 \end{array}$$

Kohlmaise

$$\begin{array}{r} 2 \cdot 20 \overline{) 4} \\ 20 \\ \hline 20 \\ 20 \end{array} \quad \begin{array}{r} 55 \\ 3 \\ \hline 165 \\ 120 \\ \hline 45 \end{array} \quad \begin{array}{r} 60 \\ 2 \\ \hline 120 \end{array}$$